Chapter X

Self-Organization and New Hierarchies in Complex Evolutionary Value Networks

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ABSTRACT

This chapter, with a broad theory building goal, addresses these two questions: “how the new network-based forms of coordination emerge, and how can they change the management of value exchange dynamics on complex cognitive networks?” We can find a useful answer by using an interdisciplinary approach. New institutions do not form through costless trust and order-for-free self-organization (the invisible hand of the market), but are managed as complex evolutionary value networks. This conceptual framework can help managers to design more cooperative structures and nodes to negotiate network structure and power. The design of the network matters. The network is the locus of learning but
also the locus of social negotiation. The new institutions can be designed, even if this design looks more like a monitory learning process and a design of the infomediation infrastructure than the well structured plans of old-fashioned management. The new network governance forms, and the logics that want to build organizations as flexible and loosely-coupled systems of self-organized peripheries, also require that we build a new “ethics of network management” agenda.

INTRODUCTION

Walter W. Powell (2001) labels these times as “confusing” … and continues … “The pace of economic and technological change appears relentless, but the direction is unfamiliar” (p. 2). We need to dig into these changes, and better understand them, in order to improve our ability to navigate and govern this turbulence. Once we have cleared the way from the frictionless accounts of these transformations (Mandelli, 2004), we still remain with the need to answer important research questions:

1. What kind of change are network technologies bringing about in the organization of society and the economy?
2. Are these changes going to transform economic governance toward more cooperative forms based on trust?
3. What kind of changes are these new forms of governance going to produce in management philosophy and practices?

We will begin to answer these questions, structuring them in a narrower issue: “how the new network-based forms of coordination emerge, and how can they change the management of value exchange dynamics on complex cognitive networks?”

New institutions do not form through costless trust and order-for-free self-organization, but are managed as complex evolutionary value networks. We introduce this concept, building on Castelfranchi’s (2000) idea that social order in network societies emerge from a complex interplay between self-organized market dynamics and central and formal social control. With this we also include Castelfranchi’s (1998) idea that trust relationships in networks are both calculated and altruistic, and both intentional and emergent. In Rullani and Vicari (1999) and Vicari (2001), organizational networks are conceived as evolutionary complex systems with which we integrate the study of the economics of relationship and mediation (Mandelli, 2001, 2003). This integra-